

Notice of Allowability

Application No.

10/722,567

Applicant(s)

SASAKI ET AL.

Examiner

Neveen Abel-Jalil

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/16/2007.
2. ☒ The allowed claim(s) is/are 3-6.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

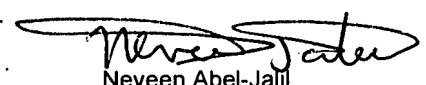
* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


Neveen Abel-Jalil
AU 2165

DETAILED ACTION

Remarks

1. The Amendment filed on April-16-2006 has been received and entered. Claims 1-2 have been cancelled. Therefore, claims 3-6 are now pending.
2. Applicant's amendment has overcome the rejections under 35 USC 112, second rejection and the claim objections.

EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Allen Wood (Attorney of Record) on May 1, 2007.

Amendments to the Claims:

4. This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-2 (canceled).

3. (currently amended) A numerical information retrieving device for retrieving numerical information, comprising:

- input means for inputting a document to be retrieved, the document containing a numerical expression in a first form;

- an attribute information dictionary which stores therein attribute names indicative of attributes, and conditions under which the attributes are bestowed;

- attribute bestowal means for bestowing an attribute on the numerical expression in the inputted document by referring to the attribute information dictionary;

- a conversion information dictionary which stores attribute names indicate of attributes, non-converted character strings, and converted character strings therein;

- numerical conversion means for converting the numerical expression having the attribute bestowed by the attribute bestowal means, from a non-converted character string into a converted character string by referring to the conversion information dictionary, so as to convert the numerical expression into a numerical expression in a second form;

- extraction means for extracting a retrieval keyword from the document after conversion by the numerical conversion means;

- a document database which stores document data therein;

- document storage and retrieval means for storing the document after the conversion by the numerical conversion means, the inputted document, and the extracted retrieval keyword in the document database; and

- output means for outputting a retrieved result;

wherein the document storage and retrieval means retrieves any document whose retrieval keyword agrees with the numerical expression after the conversion by the numerical conversion means, from the document database, and sends the retrieved document as the retrieved result to said output means.

4. (currently amended) A numerical information retrieving device for retrieving numerical information, comprising:

- input means for inputting a document to be retrieved, the document containing a numerical expression in a first form;

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an attribute information dictionary which stores therein attribute names indicative of attributes, and conditions under which the attributes are bestowed;

attribute bestowal means for bestowing an attribute on the numerical expression in the inputted document by referring to the attribute information dictionary;

a conversion information dictionary which stores attribute names indicative of attributes, non-converted character strings, and converted character strings therein;

numerical conversion means for converting the numerical expression having the attribute bestowed by the attribute bestowal means, from a non-converted character string into a converted character string by referring to the conversion information dictionary, so as to convert the numerical expression into a numerical expression in a second form;

extraction means for extracting a retrieval keyword from the document after conversion by the numerical conversion means;

a document database which stores document data therein;

document storage and retrieval means for storing the document after the conversion by the numerical conversion means, the inputted document, and the extracted retrieval keyword in the document database;

an extraction information dictionary which stores therein attribute names indicative of attributes, range specifying words indicative of expressions of ranges, comparing conditions indicative of relations of magnitudes of comparisons, and alignment orders indicative of orders to rearrange outputs;

rearrangement means to rearrange the outputs; and

output means for outputting retrieved results;

wherein the extraction means extracts an attribute name, a numerical value and a range specifying word from the numerical expression after the conversion by the numerical conversion means;

wherein the rearrangement means compares the numerical value extracted from the numerical expression, with respective numerical values of a plurality of retrieval keywords whose attribute names agree with the attribute name extracted from the numerical expression, and selects the retrieval keywords as to which results of the comparisons are suited to a selected one of the comparing conditions of the range specifying word and rearranges the selected

retrieval keywords in a selected one of the alignment orders, by referring to the extraction information dictionary; and

wherein the document storage and retrieval means searches for retrieval keywords whose attribute names agree with the attribute name extracted from the numerical expression, from said document database, and sends the keywords searched for, to the rearrangement means, and the document storage and retrieval means also retrieves any of a plurality of documents which agree with the rearranged retrieval keywords, from within the document database, and sends the retrieved documents as the retrieved results to the output means, in the order of the rearranged retrieval keywords.

5. (currently amended) A numerical information retrieving device for retrieving numerical information, comprising:

input means for inputting a document to be retrieved, the document containing a numerical expression in a first form;

an attribute information dictionary which stores therein attribute names indicative of attributes, and conditions under which the attributes are bestowed;

attribute bestowal means for bestowing an attribute on the numerical expression in the inputted document by referring to the attribute information dictionary;

a conversion information dictionary which stores attribute names indicate of attributes, non-converted character strings, and converted character strings therein;

numerical conversion means for converting the numerical expression having the attribute bestowed by the attribute bestowal means, from a non-converted character string into a converted character string by referring to the conversion information dictionary, so as to convert the numerical expression into a numerical expression in a second form;

extraction means for extracting a retrieval keyword from the document after conversion by the numerical conversion means;

a document database which stores document data therein; and

document storage and retrieval means for storing the document after the conversion by the numerical conversion means, the inputted document, and the extracted retrieval keyword in the document database,

wherein the attribute bestowal means bestows an opening tag and a closing tag of the attribute before and behind a condition part of an original sentence, respectively, by referring to the attribute information dictionary.

6. (currently amended) A numerical information retrieving device for retrieving numerical information, comprising:

input means for inputting a document to be retrieved, the document containing a numerical expression in a first form;

an attribute information dictionary which stores therein attribute names indicative of attributes, and conditions under which the attributes are bestowed;

attribute bestowal means for bestowing an attribute on the numerical expression in the inputted document by referring to the attribute information dictionary;

a conversion information dictionary which stores attribute names indicate of attributes, non-converted character strings, and converted character strings therein;

numerical conversion means for converting the numerical expression having the attribute bestowed by the attribute bestowal means, from a non-converted character string into a converted character string by referring to the conversion information dictionary, so as to convert the numerical expression into a numerical expression in a second form;

extraction means for extracting a retrieval keyword from the document after conversion by the numerical conversion means;

a document database which stores document data therein; and

document storage and retrieval means for storing the document after the conversion by the numerical conversion means, the inputted document, and the extracted retrieval keyword in the document database,

wherein the attribute bestowal means bestows the attribute by referring to the attribute information dictionary, and attribute information data indicative of the attribute of a condition part in an original sentence is held separately from the inputted document without altering the inputted document.

Allowance

5. Claims 3-6 are allowed over the prior art made of record.
6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 571-272-4074. The examiner can normally be reached on 8:30AM-5: 30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read 'Naveen Jalil', with a horizontal line drawn through the middle of the signature.

Naveen Abel-Jalil

May 31, 2007